



Lewis Research Center

NGST

Proton

● Performance

- Escape ($C3 = 0 \text{ km}^2/\text{sec}^2$): 4800 kg
- 1 AU x 3 AU ($C3 = 45 \text{ km}^2/\text{sec}^2$): 1660 kg (assuming late fairing drop)
- 1 AU x 5 AU ($C3 = 77 \text{ km}^2/\text{sec}^2$): <400 kg

● Fairing/Payload Envelope

- 4.35 m composite fairing
- Envelope maximum cylindrical diameter: 3.88 m
- Envelope overall length: 7.3 m
- Envelope cylindrical section length: 3.5 m

● Fairing Growth Plans

- 5 m class fairing under development

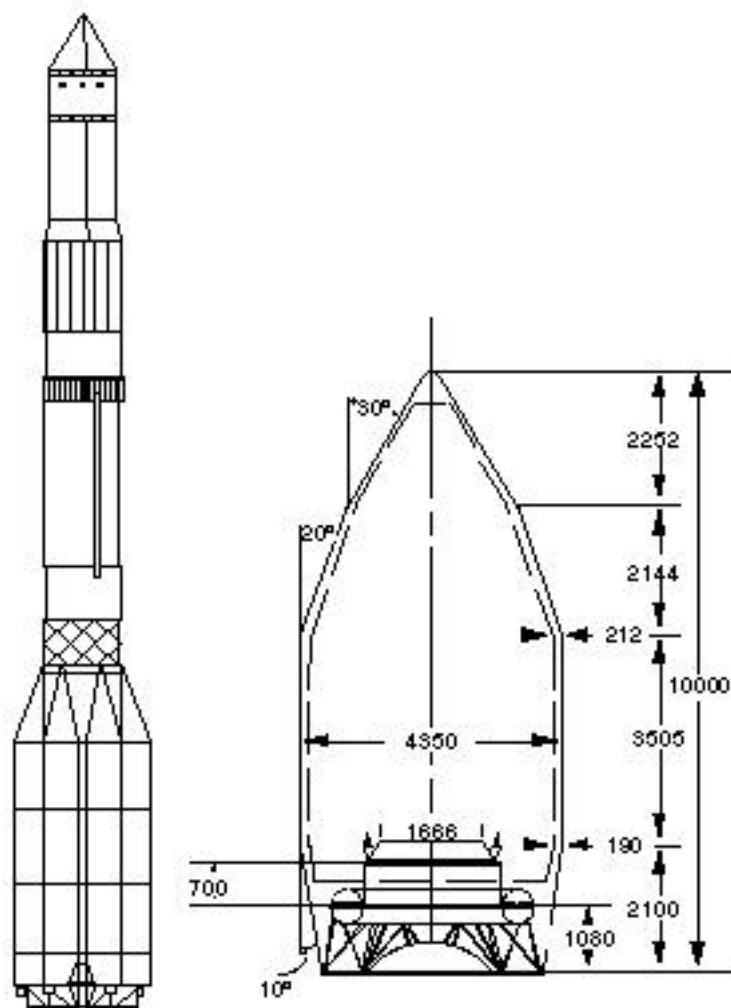
● Launch Availability

- Baikonur Cosmodrome: 2 pads

● Basic Launch Service Cost

- \$50-70M (AIAA International Reference Guide to Space Launch Systems)
- Possibility of Russia-provided launch under cooperative program

http://www.lmco.com/ILS/txtmain/design_proton.htm



Launch Services & Transportation Projects Office